

Possible frost damage to native vegetation — On 28th June 1984, Ranger Jim Smith at Fitzgerald River National Park noted yellowing and some death in shrubs on Edwards Point track about 17 km west of Hopetoun, 2 km inland from the sea, and within the Fitzgerald River National Park. The effect was described as "similar to the area having been aerially sprayed with herbicide".

I examined the damage in detail on 12th July, by which time extensive deaths and yellowing of the vegetation were apparent. The majority of deaths were *Acacia rostellifera* which was emergent to 1.5 m above a mixed heath containing a diverse flora including *Boronia*, *Lepidosperma*, *Dryandra* and *Restionaceae*. Height of the heath layer was mostly less than 1 m tall and all were healthy. On the edges of the heath and scattered within it were *Eucalyptus platypus* var. *heterophylla* to 3-4 m tall. All foliage below about 2.5 m had been killed but the tops of the mallees and trees were healthy.

Effectively, all soft leaved plants with foliage more than 1 m off the ground and less than 2.5 m above ground had been killed yet hard-leaved shrubs such as *Hakea prostrata* which occupied this zone had survived.

Microscopic examination of the *Acacia* leaves showed that cells of, and immediately below, the epidermis had burst.

It is believed this was caused by freezing of the leaves. The *Eucalyptus* leaves were mainly damaged on the edges, with the same anatomical effects as the *Acacia*, but the thicker central portions of the leaves were normal.

Examination of the area of damage showed that about 4 ha had been affected at this site and two other nearby sites of about 6 ha each were also observed.

The only likely explanation is that some kind of inversion layer which followed the slopes of the valleys had killed with frost all foliage of soft-leaved plants between 1 and 2.5 m above ground on the slopes, but reaching slightly lower on the valley floors. Apart from the deepest portions of the valley, all foliage above or below these heights above the ground was unaffected.

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On the distribution of two north Australian agamid lizards, *Chelosania brunnea* Gray and *Chlamydosaurus kingii* Gray — There are only two records of *Chelosania brunnea* from the Dampier Peninsula (Storr & Johnstone, 1983. *Wildl. Res. Bull. Aust.* 11:71-72). The first in April 1977 at Martins Well, and the second in September 1978 "near Cape Boileau". Storr, Smith & Johnstone (1983. *Lizards of Western Australia II: Dragons and Monitors*. W.A. Museum.) give its distribution as south to Coulomb Point in this region.

In November 1982 and again in September 1983 I visited Broome. During the first visit, on 26 November, I collected this species in the grounds of the Japanese Cemetery at Broome. It was at 4 pm during a thunderstorm, and the lizard was in a small depression at the base of a large tree. The depression may have been the result of a covered oviposition site, although no attempt was made at the time to excavate this. The lizard was photographed and released near the capture site.

Although Storr & Johnstone (*loc. cit.*) list *Chlamydosaurus kingii* as uncommon on the Peninsula, I observed several on both trips (4 in 1982 & 7 in 1983). In all cases these were observed as active or killed on and near the road. They were sighted from 20 kilometres north-east of Broome to 60 kilometres south of the Broome-Great Northern Highway junction (to lat. 18°15'S). Only one of the eleven lizards observed was south of the Roebuck Plains. Storr *et al.* (*loc. cit.*) list this species as being found south almost to Broome. The lack of records for it on the Peninsula may be attributed to a combination of both the locals' biased attitude towards this large lizard, and the possibility that it may have only a brief intermittent period of seasonal activity.

I thank Harry Ehmann for his comments on these notes.

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Pied Butcherbird in the Perth area — On the morning of 20 July 1983 I heard and saw a Pied Butcherbird (*Cracticus nigrogularis*) near Shelley Bridge on Leach Highway in the Perth suburb of Wilson. The bird was in full adult

plumage and was perched high on a dead limb, singing its characteristic penetrating song. Shortly after my arrival, a pair of Red Wattle-birds (*Anthochaera carunculata*) began to mob the butcherbird and the three birds gave a good display of aerobatics before I lost sight of them about 5 minutes later.

The few previous published observations of the Pied Butcherbird in the Swan Coastal Plain are by D.L. Serventy (1948, *Emu*, 47:785); R. Stranger (1953, *West. Aust. Nat.*, 6:184); A.J. Mathews (1973, *West. Aust. Nat.* 12:141); and Serventy and Whittell (1976, *Birds of Western Australia* (5th ed.), 450).

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Third Record of Leach's Storm-Petrel (*Oceanodroma leucorhoa*) in Australia -

On 18 July 1984 Mr G. Keen, a National Park Ranger, found an exhausted seabird that had flown into his door at Quaalup homestead, 15 km NNE of Bremer Bay, Western Australia and 9 km from the sea. The bird died soon after, was frozen, and eventually passed on to Mr B. Muir, also of the National Parks Authority. Mr Muir donated the specimen to the Western Australian Museum where it was prepared into a study skin (registered number A18420) and identified as *Oceanodroma leucorhoa* (Vieillot).

Details of the specimen are as follows: female with ovary 5 x 3 mm, oviduct narrow and straight, weight 30 g, total length 198 mm, exposed culmen 16.5 mm, entire culmen 23.5 mm, wing 157 mm, tail (forked) 81 mm, tarsus 24.5 mm, skull fully ossified, legs black, bill black, body mainly blackish-brown (darkest on primaries, secondaries and tail), rump white partly divided down middle by dark greyish-brown, primary and secondary coverts brown (forming a pale diagonal bar across each wing), some undertail coverts white.

Leach's Storm-Petrel breeds on islands in the north Atlantic (including Newfoundland, Iceland, Faeroes and British Isles) and north Pacific (from Hokkaido to Alaska). It migrates south to winter mainly in equatorial seas. Many North Atlantic birds winter off west Africa but very few pass beyond the tropics into the Indian and Southern Oceans. Little is known of their return migration but most breeding adults leave their winter quarters by mid April.

Based on the size of its ovary, the narrow straight oviduct and date of collection, this bird was a non-breeder and probably reached Western Australia via the Cape of Good Hope, crossing the Indian Ocean with the assistance of the prevailing westerlies (Roaring Forties).

There are two other Australian records, one bird found at Cutting in western Victoria on 4 July 1965 and one found at Pelican Point, Western Australia on 15 April 1978.

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